MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 1, 2016/2017

BAC3684 – SECURITIES INVESTMENT AND PORTFOLIO MANAGEMENT

(All sections / Groups)

11 OCTOBER 2016
9.00 a.m – 12.00 p.m
(3 Hours)

INSTRUCTIONS TO STUDENTS

1. This question paper consists of **FOUR(4)** printed pages.
2. Answer **ALL** questions.
3. Marks are shown at the end of each question.

Question 1 (25 Marks)

a) Consider the total returns for both companies A and B for the period 2003-2012. The summary statistics for these two stocks are as follows:

	Company A	Company B
Return (%)	11.1	18
Standard Deviation (%)	18.9	29.8
Correlation Coefficient	0.23	0.23

i) Calculate the portfolio standard deviation for both companies if the weights are equal (50% in each company)

(5 marks)

ii) Discuss the relationship between covariance and correlation, and calculate the covariance between company A and B.

(4 marks)

iii) Discuss the importance of covariance in portfolio analysis when new security is added to a large portfolio of securities.

(4 marks)

b) i) Explain Markowitz model and what the model aims to achieve?

(6 marks)

ii) How does an investor decide where to be on the new efficient frontier represented by the Capital Market Line (CML) ? In your answer please draw a graph to explain how investors choose their investment on the efficient frontier.

(6 marks)

Continued...

Question 2 (25 Marks)

Taj Berhad expects reported earnings of RM6 per share next year. The management team has agreed to maintain a constant payout ratio of 20% and investor's required rate of return is also 20%. Assuming that reinvested income earns a return of 20%:

a) Calculate the earnings per share, retained earnings and dividends per share for the next three years. Show your results in a table.

(9 marks)

b) Based on your result in the above question; calculate the growth rate in dividends for Taj shares.

(1 mark)

c) What is the value of Taj's stock today?

(1 mark)

d) What happens to the price of Taj's stock as the payout ratio change to 60% and 80%?

(10 marks)

e) Summarize the results in (a), (b), (c) and (d). What can you conclude in terms of the trade-off between company's payout ratio, the growth rate in dividends and current value of the stock?

(4 mark)

Continued...

Question 3 (25 Marks)

a) Calculate the current yield of a bond if par value is RM 1000, annual coupon rate is 8% and the value of the bond is RM 961.63?

(4 marks)

b) If you are financial consultant, how do you explain the differences between yield to maturity and current yield?

(6 marks)

c) As part of your new investment in options, you are required to estimate the values of your calls and puts (ignore brokerage costs).

Strike Price		Call			Put	
	April	Jul	Oct	April	Jul	Oct
140	25	n/a	n/a	3/8	n/a	n/a
150	14	21	38	1	2 1/4	n/a
160	13	16	20	3	7	15
170	4	9	13 1/4	9	10	11
180	4	5 1/4	9	n/a	20	n/a

i. Using the data given in the table, calculate the cost of 10 October 150 call contracts in total dollars.

(5 marks)

ii. What is the cost of 15 October 160 put contracts in total dollars?

(5 marks)

iii. If you have purchased the October 150 call contracts and October 160 put contracts and the following day, the shares has increased from RM 164 to RM 168. Discuss the effect of this increase in share prices on your options.

(5 marks)

Continued...

Question 4 (25 Marks)

a) Based on the following data for ABC stock, calculate the 5-day moving average closing price:

Day	High (RM)	Low (RM)	Close (RM)
1	89.80	87.80	87.88
2	89.90	87.80	89.38
3	87.50	85.70	87.31
4	89.10	87.50	87.81
5	90.30	87.75	88.13
6	89.10	86.70	88.81
7	88.40	85.50	86.75
8	90.60	85.40	85.44
9	91.10	88.60	89.50
10	92.70	88.10	89.31
11	91.90	90.10	91.31
12	91.75	89.25	89.50
13	92.25	89.60	90.81
14	92.75	90.40	92.00

(10 marks)

b) Using the result is question (a), plot the moving average and daily closing prices on the same chart. Use a bar chart to represent closing prices and a line to represent the moving average.

(10 marks)

c) What does the moving average line indicates and what is the indicator for bullish and bearish trend?

(5 marks)

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